

Newsletter for Birdwatchers

Vol. 47

No. 5

September - October 2007



2



3



4

Editorial Board

Dr. A.M.K. Bharos	Prof. S. Rangaswami
Harish R. Bhat	K. Mrutumjaya Rao
Dr. S.P. Bhatnagar	A.N. Yellappa Reddy
Dr. A.K. Chakravarthy	Dr. Rajiv Saxena
Dr. Ranjan Kumar Das	Dr. A.B. Shanbhag
Dr. S. Devasahayam	Arunayan Sharma
B.S. Kulkarni	S. Sridhar
Arvind Mishra	Dr. Abraham Verghese, FRES (London)
Dr. Geeta S. Padate	

Publisher : S. Sridhar

CONTENTS

■ **Note from the Publisher**

- Conservation In Action - A Photofeature

■ **Articles**

- Prompt action by the local community saves a nesting colony of Terns and Pratincoles at Halmaddi Island, Belgaum, Karnataka, by S. Shreyas
- Breeding biology of Green Bee-eater *Merops orientalis* in Chiplun, Ratnagiri district, Maharashtra, by Sachin Balkrishna Palkar and Vishwas Vishnu Joshi.
- Some observations of sightings and occurrence of Black-winged/ White-naped Tit *Parus nuchalis* in Southern Rajasthan, by Shailendra Tiwari.
- An avifaunal study of Malleswara Gudda and its environs, by P. Guruprasad, Vijayalaxmi and D.H. Tanuja.

■ **Correspondence**

- Nesting of Common Kestrel in the Upper Nilgiris, by Sellamuthu Somasundaram.
- Distribution range extension of Red-whiskered Bulbul *Pycnonotus jocosus*, by A.M.K.Bharos.

Enroll a Friend

**If every Newsletter Member could enrol
just one new member our reach and linkage
would be doubled immediately!**

Will you Help ?

**Please give the membership form
to a friend and urge him/her to join.**

Material for publication should be sent
(in duplicate) by post or courier to :

**Newsletter for Birdwatchers
No 10, Sirur Park B Street, Seshadripuram,
Bangalore 560 020, India.**

along with a soft copy (in MS Word format only) via
E-mail to <navbarat@gmail.com>

Note from the Publisher

Dear fellow Birdwatchers,

Conservation in Action – A Photofeature



In this issue we have published an exclusive photofeature that illustrates the honest efforts made by the local community to save an isolated nesting colony of terns at Halmaddi Island, near Belguam, Karnataka.

The eco-committee of Halmaddi established by Mr. R. G. Timmapur and other nature lovers, has a few proposals which need to be assessed by experts. The experts can also look at the prospects and potentials for substantive and qualitative improvement of this unique wetland habitat.

In view of the strategic location of Halmaddi island in the backwaters of the Hidkal Dam, we should exercise the greatest care in identifying the problems in this sensitive habitat. Consequently, a multitude of issues need to be addressed and one has to not only comprehend them in totality but also understand the ground realities precisely, before suggesting a comprehensive scheme to the authorities for implementation. It is perhaps a good idea to manually dredge the four feet wide landmass, to permanently disconnect the island from the mainland during summer. This will not only maintain the status of the island, but also encourage Terns and Pratincoles to nest here on a regular basis.

While we are on the subject, I would like to recall an astute statement made by Jeff Turner, the celebrated BBC Wildlife Cinematographer: *“Wild animals and birds are reflections of our own lives, but our own actions come in the way of appreciating these realities. We can save only something we care, only something we understand and appreciate”*. Timmapur and his nature loving friends have saved the Terns and Pratincoles because they understand them and are appreciative of their lives, as their own.

I am also reminded of another thought provoking statement of our own modern philosopher Sri Jiddu Krishnamurti, who was profoundly concerned about the widespread destruction of nature: *“Have you any relationship with nature, with the birds, with the water of that river? You may call it Ganga, or the Thames, the Nile or the Mississippi. All rivers are holy, but getting more and more polluted. — What is your relationship with all that — with the trees, with the birds, with all the living things that we call nature? Aren't we part of all that? So, aren't we the environment?”* Further, Krishnamurti had maintained that: *“We live in a time of growing awareness that threatens to our natural environment, and very survival, demand a radically new, worldwide approach”*.

For that reason, it is essential to come to terms with the uncomfortable fact that we have caused many problems and shortchanged the world for these naive, elegant birds in far too many ways. A welcome attempt to reverse this appalling trend has been initiated by Timmapur *et al.*, who have successfully connected the local community with nature, to protect a nesting colony of terns and pratincoles.

Thanking you,
Yours in Bird Conservation,
S. Sridhar, *Publisher, NLBW.*





Prompt action by the local community saves a nesting colony of Terns and Pratincoles at Halmaddi Island, Belgaum, Karnataka.

S. Shreyas, Institute for Natural Resources Conservation, Education, Research and Training, No 10, Sirur Park B Street, Seshadripuram, Bangalore 560 020 Email: shreatnavbarat@yahoo.com

The nesting colony

During the last week of March 2006, I received a phone call from Mr. R. G. Timmapur, HDP High School, Hidkal Dam, Belgaum. He enthusiastically told us that 100's of Little Terns (*Sterna albifrons*), Indian River Terns (*Sterna aurantia*) and Small Indian Pratincoles (*Glareola lactea*) were nesting in the Halmaddi Island in the middle of the Ghataprabha river, in the backwaters of the Hidkal Dam. Timmapur sounded ecstatic because it was for the first time that the Little Terns were nesting in the island. He even began describing their calls, aerial maneuvers, feeding habits, breeding behavior, etc.

But, the problem for the birds nesting in the island came in the form of the island getting connected to the mainland, through a small strait or a walkway. This happened rapidly, as the water from the reservoir was being released to the canals for irrigation. By the first week of April, when the nesting was at its peak, the island got connected to the mainland in this fashion.

I was thrilled about the news of the nesting terns, but was also vexed about the news of the island getting connected to the mainland, due to the gradual drop in the water level. I spoke to Timmapur on day-to-day basis, as I was anxious about the success of the colony, and decided to pay a visit along with my birdwatching associates to this nesting colony. We drove all the way from Bangalore to Hidkal Dam covering the distance of 550 km. and reached the Halmaddi Island by 5 pm on 29th of April 2006, where Timmapur and his exuberant students were patiently waiting for us. After trundling our Qualis down the rocky terrain surrounding the dam, we reached the bank of the Ghataprabha River. Timmapur had arranged a couple of coracles, which were being used by the nomadic fishermen. The terns were flying rapidly in formations of 200 or more, as if they were seriously practicing for an impending air show. We even noticed several pratincoles joining the terns in their aerial maneuvers (See Pic. 9 on cover page).

When our coracles approached the island, several terns agitatedly picked up a feverish commotion and dived at us menacingly. I closed my eyes waiting for the impact of their beaks against my head, but was relieved when the terns deftly sidetracked at the last millisecond; only to repeat the mock attack all over again. Our boats were taken to a part of the island that was in part slushy with small half-eaten fish scattered around. We disembarked with photographic equipment and other paraphernalia and trudged at a snail's pace towards the center of the island, carefully avoiding the nests that were scattered all over the island. The eggs were remarkably camouflaged, resembling the pebbles strewn in the sandy topsoil of the island. We were amazed to notice the chicks exhibiting predator avoidance behavior on hearing the admonishing calls of their parents. Whilst the small hatchlings

instantly buried their heads between their legs and remained frozen, the slightly larger fledglings promptly ran for cover or crawled into small gaps in-between the rocks, which were inaccessible to predators.

The bedrock of solidarity between the Indian River Tern, the Little Tern and the Small Indian Pratincole was their habit of collective action of mobbing and chasing away other avian and ground trespassers such as crows, kites and snakes.

The sun was about to set and we had to leave the island quickly. After a rough count, a brief photographic and videographic session for our records, we returned to our coracles and set sail toward the bank, as the radiant orange sunrays dazzled the skies. By now 1000's of terns were seen moving collectively in flocks like an armada, changing directions and formations at will, tweeting all the while and thoroughly enjoying the sunset (Pic. 8).

The Halmaddi Island incidentally, has some 3500 years old megalithic period archeological treasures. Some tombs belonging to this period have been unearthed in recent years from this island. The bank of the river has the exquisitely built 'Vittalaraya Devalaya' temple. On account of the submergence of this temple by the backwaters of the Hidkal dam, a new temple was built at a higher elevation. However the old temple surfaces when the waters recede in summer. After reaching the bank we spent a short time admiring the tranquility of the backwaters, the panorama of the island, and the seamless rustic ambience around the venerable Vittalaraya devalaya temple (Pic. 10). Soon after the sunset we drove to Mr. Timmapur's house to spend the night. The Timmapurs were a very hospitable couple indeed, especially Mrs. Timmapur, a teacher by profession, who had prepared a sumptuous dinner for us. We confess that her culinary skills are second to none.

On the next day by dawn, we were back at the island by which time the terns and pratincoles were already fishing incessantly to satiate their young ones. We counted some 150 nests. Around 20 of them belonged to the Little Terns (Pic. 1) and the rest belonged to the Indian River Terns (Pic. 3). Although we saw several Black-bellied Terns (*Sterna acuticauda*), we could not spot any active nest. This is probably the first time, the Little Terns have been spotted nesting in this part. This unique occasion provided a valuable opportunity to study the nesting terns and Pratincoles from a close range, but without disturbing them.

The nesting pattern is all the more striking. Whilst the Small Indian Pratincoles (Pic. 4) prefer to nest under the boulders or secure crevices, Indian River Terns prefer to nest both in the open as well as in the gaps between the boulders. Likewise,

the Little Terns seemingly prefer the sharply polarized open nesting niche at the highest point on the island (Pic. 1). Here, they maintained an exclusive colony of loosely scattered nests which is resolutely defended against any intruding river tern by launching a collective attack. Besides, they prolong their tenacious cacophony and warning shrieks, until the river terns retreat from their exclusive nesting zone. But Pratincoles were generally tolerated by the Little Terns without any hostile behavior.

The Little Terns invariably nested in the open. The nesting pair was seen incubating the eggs, feeding the chicks or providing shade to the nestlings by rotation. In the Black-bellied terns that had successfully nested during March 2004, Mr. Timmapur noticed the male bringing fish to the female at nest. On the other hand, the Little Tern at nest merely moved over, whenever its partner arrived to take over and pursue the familial responsibilities. The Little Terns were noticeably more aggressive while nesting and their chicks were also much more active when compared to the chicks of Indian River terns.

Some River Tern fledglings were also active as they were seen running around or clambering up the rocks and calling profusely and demanding food from their parents. Most of the River tern nests had 3-4 eggs, and a few were in the process of hatching (Pic 7). We came across only two abandoned nests with 3 rotting eggs in each.

It was mid-summer and oppressively hot, but the occasional cool breeze brought some relief, once in a while. Several Indian River Terns were spotted lazing around all the time, as if enjoying a sunbath (Pics 2 & 5). They probably had finished their nesting. At least 400 terns and pratincoles could be seen fishing at any given point of time. We saw around 10 pratincole nests, most of them had only one chick; (the others had probably left the nest, leaving the youngest sibling behind) this also suggests that most of the pratincoles had started breeding around the same time as the terns, as they found safety in numbers. Among the terns, the chick feeding frequency was irregular; this may be because of the presence of fairly large sized fish, in the backwaters of the dam. The fish were pretty big for the tern chicks and they preferred to remain quite without calling for a good 30 to 45 minutes, after each feed. All the chicks spotted were healthy, which is also indicative of the water quality in the dam, where washing or bathing is seldom allowed. Fishing is regulated and carried out twice a day by only two families of nomadic fishermen, who stay near the dam.

Conservation In action

Was it a paradise for the nesting terns and pratincoles, or were they living on borrowed time? The island was on the threshold of becoming a 'battleground nesting habitat' for the birds, given that the water level was receding alarmingly and by 10th April, the island was connected to the mainland through a narrow landmass.

So delicate was the status of island nesting habitat that even a single day's negligence or imprudence could result in utter nesting failure. For instance, the island got submerged as soon

as the rain waters entered the reservoir. But the island began to surface by February, as the water was gradually released from the Hidkal Dam for irrigation. Then the island got connected with the mainland by the beginning of April. In the ephemeral three months period, the terns had arrived, indulged in the customary courtship to select their partners, laid their eggs and incubated them. But now their dilemma was that the island was connected to the mainland through a narrow strip of land, exposing their chicks to ground predators. This had happened even before they could rear their young to adulthood by teaching them the nuances of fishing and survival.

Thus the nesting terns and pratincoles were confronted by this grave challenge and they were on the verge of losing their eggs and nestlings, save for the timely action of the local community.

When I asked Timmapur about the discovery of this splendid nesting colony and the efforts initiated to protect the colony, he told me that he and his friends were on a regular birdwatching trip to Hoonor Cross, which has the backwaters of the river Ghataprabha, to checkout the nesting of Indian River Terns, during the last week of March 2006. They had noticed some 150 pairs of Indian River terns actively courting and some were found incubating their eggs. In all some 30 active nests were recorded by March-end by Timmapur. Some 300 Whiskered terns (*Chlidonias hybridus*) were also visiting the island at that time but they did not nest here. About 400 Small Indian Pratincoles, were counted. Many were seen courting and about 20 nests were also counted during Timmapur's visits during March.

Timmapur was surprised to notice some 60 Little Terns, flying about the island. Meticulous investigation revealed two active nests of Little Terns. Later Mr. Niranjana Sant of Belgaum, was requested to photographically record the nesting events. He located some seven nests of the Little Tern, which had nested for the first time in the history of the Halmaddi island.

When the island was about to get connected to the mainland, Timmapur and his friends contacted the Forest Department (Social Forestry) officials, who plainly deemed the idea of saving the nesting colony as a frivolous pursuit. As such the island was neither a Reserve Forest nor a Sanctuary; they excused themselves by shifting the responsibility to the Irrigation Department. Thereafter, Timmapur held rapid consultations with many bird lovers. Mr. Vijay Mohan Raj, of the North Karnataka Birdwatcher's Network, advised Timmapur, not to wait for the officials to act, but to swiftly establish a local committee to protect the nesting colony from predators. Propelled by a desire to save the nesting colony, Timmapur endeavored day and night to convert public apathy into positive support for the nesting terns. He established a committee of 30 members, comprising his former students Ningappa Kamati, Basavaraj Kamati, Vittal Poojari, Veerappa Bennadi, Annappa Poojari, Shankar Patil and others. The members of the committee surmised that there was no need to obtain permission from anybody to save the nesting colony.

The first meeting of the committee was held on 6th April 2006, which was attended by Niranjana Sant. By 10th April the water level

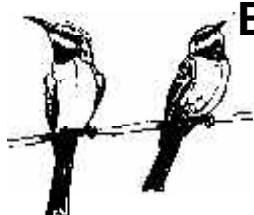
had dropped considerably and the island was accessible to any predator through the strip of landmass. Given that the nesting terns and pratincoles were on brink of losing their progenies, the members took up the task of protecting the island by standing at the entrance of the strip of land that had surfaced, and promptly warded off any predators that dared to venture to the island. The ever vigilant volunteers stood guard continuously from 10th April to 20th May 2006 and warded off predators such as stray dogs, foxes, jackals, civet cats and wild cats. Even a day's carelessness could have resulted in the failure of the nests at the island. Incidentally, in 2003 and 2004, the above said predators trespassed to the island through the landmass that had surfaced in a similar way and feasted upon the hapless chicks and eggs of the Indian River terns.

During the nights also a similar vigil was maintained by Ningappa Kamati and Vittal Pujari who had lit up a bonfire using the dried stalks of maize, to deter the predators from gaining entry to the island through the connecting landmass. In addition, discarded cassette tapes were festooned and freely tied like buntings to the vegetation at the entrance of the passage to frighten the predators. Dr. Satish Pande of Pune and Dr. Dinesh Kowshik of Gokak, visited the island and lauded the members individually for their ceaseless efforts to protect the tern colony, and encouraged them to keep up the good work until the terns finished their breeding activities. Yet a pair of foxes had somehow hoodwinked the sentinels, sneaked into the island and devoured some 10 defenseless tern chicks, leaving behind only their wings as telltale evidence. The vigil was maintained up to 20th May, by which time most of the chicks had successfully fledged. The remaining chicks were able run

for cover and hide behind the boulders and crevices to dodge the predators. In all 25 pairs of Little Tern nested successfully between March and May, bringing absolute joy and satisfaction to one and all. The committee had also prominently displayed four large sized banners, which were donated by Mr. Niranjana Sant. We saw two such banners; one in the courtyard of village and the other at the entrance of the new temple at Halmaddi (Pic.6). The banners contained the photographs of the nesting terns and urged the local community to protect this nesting colony, in their native language. Their role in protecting the nesting birds ought to be recognized and wholeheartedly appreciated by all nature lovers. As such the local community is taking the initiatives; Halmaddi could be a perfect breeding ground for terns and Pratincoles, as much as Kokre Bellur or Veerapura, which are the ideal breeding grounds for Painted Storks, looked after by a caring local community.

Incidentally, Timmapur also told me that two nesting attempts were made by the Black-bellied Terns in another location nearer to the Hidkal Dam, during March 2006, but their labour of love went in vain, when a pair of fox made a quick meal of the Black-bellied tern's eggs.

It is a good fortune for the terns and pratincoles that Timmapur and his friends have given the vital head start by involving the local community in conservation activities. We nature lovers should consolidate the initial gains and garner national and international acclamation of the conservation efforts made by local communities, however small it may seem.



Introduction

Green bee-eater *Merops orientalis* a member of the Meropidae family is a small slim green coloured insectivorous bird found throughout India from Himalaya, Bangladesh, Pakistan, Sri Lanka, and Myanmar. It is a resident breeding bird found in open areas, seacoast, gardens, farms, forest clearings etc.

Its head and neck are tinged with reddish brown and the central pair of tail feathers is elongated, blue cheeks, with black coloured slender, long, slightly curved black bill. Sexes are alike (Ali & Ripley, 2001).

In their non-breeding period the birds are found in flocks of 100-150 perched in a row on telegraph wires and are also observed roosting on leafy trees after sunset. Occasionally they are observed sand bathing.

The call of this bird is a pleasant jingling *tree-tree-tree* or *teerp-teerp-teerp* or *tit-tit-tit* punctuated from time to time (Ali &

Breeding biology of Green Bee-eater *Merops orientalis* in Chiplun, Ratnagiri district, Maharashtra

Sachin Balkrishna Palkar and Vishwas Vishnu Joshi.

Sahyadri Nisarga Mitra. Near D.B.J.College, Sathybhama Sadan, Mumbai-Goa Highway, House no.100. A/P-Chiplun, District – Ratnagiri. Maharashtra, India. 415 605. Email: - sachinbpalkar@gmail.com.

Ripley, 2001). Birds are observed gliding in the air and catching flying insects, dragonflies, etc..

"Veda Raghu, Rawa" are the famous Marathi names of this bird. Very little data regarding its nesting behaviour is available. We have adapted a successful method to study its nesting behavior as reported in this paper. We undertook the study to collect data regarding nest excavation, egg laying, hatching and chick feeding.

Material & Method

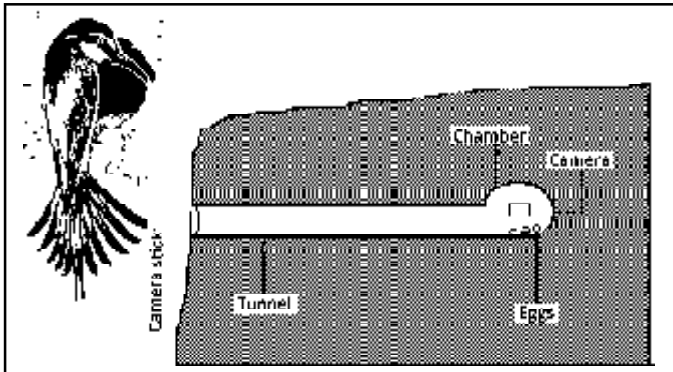
The study was carried out in Chiplun city 17°-31'N; 73°-31'E district Ratnagiri. Maharashtra, India. It is 50 km away from the Arabian Sea and 13 km away from the Western Ghats. Temperature in this area is between 23°C and 40°C.

The birds selected earthen banks for excavating their nest, so observations inside the nest are very difficult. To overcome this problem, we placed a close circuit camera stick (A small close circuit television camera was attached to one end of the stick. Size of the camera was 2.5 cm in diameter. It was operated on a 6 volt battery and was connected to a battery operated L.C.D. display. A small 3 volt bulb was attached to the camera for providing light inside the chamber). Some observations were made by using a 7 x 50 binocular.

We inserted the camera stick when the bird left the nest. Then all connections were started. The entire area inside the chamber was easily visible on the L.C.D. display. The typical nests which were straight (Nest No.1 and 2) had flat chamber at the basement of the tunnel so that eggs inside the chamber could be easily observed without the camera stick. In order to observe inside these nests, we focused a small mirror or torch inside the nest.

The nests were checked a minimum of three times up to the completion of the clutch. Then from 16th day onwards we started checking the nest, by using a close circuit camera stick. In all eight nests were checked. In six nests eggs had already been laid when we began our study. For that reason, we could not get exact egg laying dates in those nests. The remaining two nests were observed from the excavation period itself.

Diagrammatic representation of method used to observe inside the nests of Green Bee-eater



Breeding Season

Before the onset of monsoon, i.e. February to June is the breeding period of Green bee-eater *Merops orientalis* (Ali & Ripley, 2001). Birds are more vocal during these periods and are observed chasing each other.

Courtship feeding was also observed. At one site in 2005, we observed mating of this bird on telegraph wire at a distance of 10 meters from their nest. Mating lasted only a second or so. After mating the bird which was above (male) flew away the female remained there for about two minutes, before flying away.

Nest & Nest Construction

The nest is a tunnel 3-4 cm in diameter, excavated horizontally in the sandy soil, land cutting, in almost flat ground and ended in a widened egg chamber. Nests were observed in singles or in colony (Ali & Ripley, 2001). Raju Kasambe from Nagpur reported the presence of a major breeding colony of the Blue-tailed Bee-eater *Merops philippinus* in Amravati district, Maharashtra (2004).

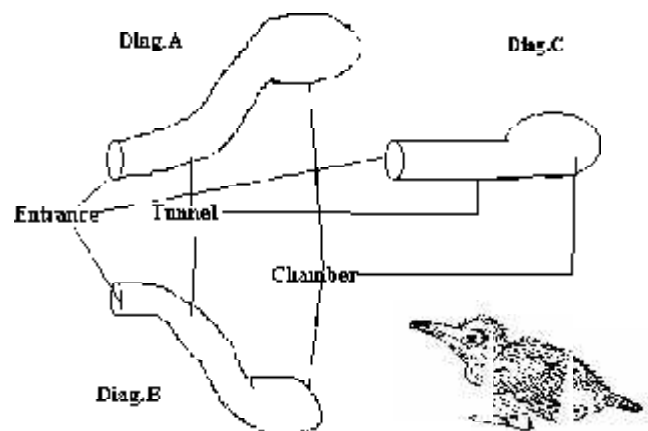
Pairs excavate new nests every year. During cloudy conditions the pairs usually remain silent. Similar facts were also recorded in Blue-tailed Bee-eater *Merops philippinus* (2004).

We observed Green bee-eater nests in a small 6 inch soil embankment of a paddy field. Minimum distance between two nests was found to be 15 meters from each other. The nests were half meter to 1.5 meters in length. The time required for nest excavation, length of the nest and direction of the tunnel depended on the texture and type of the nesting place. If any obstacles like large stone, rootlets etc. hindered the process of excavation, the excavation is stopped forthwith and birds begin to excavate another nest near the abandoned nest.

Whilst some nest tunnels were straight, some were diverted to right or left side. The egg chamber was mostly diverted to the left or right. Often the tunnels were inclined upwards or downwards. Sometimes, the birds changed the direction of the tunnel, whenever obstacles were encountered. The egg chambers were seldom lined and as such the eggs were laid on the bare ground. The basement of the chamber had no depression as found in kingfishers' nests. Frequently, the bird leaving the nest during the excavation was noticed to be carrying a small stone in its beak which is dropped at the perching site. The excavation process was at its peak during the afternoons. The central pair of tail feathers was missing at different sites during nest excavation process. It may have been lost due to constant rubbing at the basement, during entering and departing the nest. At one site three adults were observed in the nest excavation process. The excavating bird usually enters the tunnel and kicks the loose soil backwards by the reverse movement of its feet. Until the nest chamber is completed, the bird leaves the nest by crawling backwards tail first. Courtship feeding was also observed during this period.

Cross section of the nests of Green Bee-eater

Diag. A- Upward direction of the tunnel. Diag. B- Downward direction of the tunnel. Diag. C- Straight tunnel.



At two sites we observed the nest of White-breasted Kingfisher *Halcyon smyrnensis* merely two feet away from the nest of Green bee eater. Both the species were successful in their nesting. In addition, nests of Chestnut-headed Bee-eater *Merops leschenaulti*, Blue-bearded Bee-eater, Common Myna *Acridotheres tristis* and Indian Robin *Saxicoloides fulcata* were also recorded.

Eggs & Egg laying

Normally 4 or 5 eggs are laid and sometimes 6. They are pure white, round oval in structure. Average size of 100 eggs as given by Baker is 19.3 x 17.3 mm (Ali & Ripley, 2001).

Mostly the eggs were laid between 10.00 hr to 11.00 hr. In both nests eggs were laid with a gap of one day. An interval of two days between the third and fourth egg was observed in nest number 1 and an interval of three days between fourth and fifth was observed in nest number 2. The female left the nest immediately after laying the egg.

Incubation and hatching

Incubation began from the first egg itself. Incubation at night was observed from laying of the first egg. Both the birds incubated their eggs by rotation. During high temperature i.e. in between 12.00 hr to 14.00 hr very little of incubation was observed.

During interchanging, the bird which is outside the nest gives a particular call from its perch. Then the bird inside leaves the nest facilitating the other bird to continue the incubation..

In all the nests the process of hatching was asynchronous. The egg shells were removed by the bird in attendance. We also observed a black coloured small exoskeleton material and pellets inside the tunnel of the nest, which might be the undigested material regurgitated by birds during the incubation process.

Incubation period is considered, as defined by Skutch, to be the period from the laying of the last egg of a clutch to the hatching of the last nestling (Skutch, A.F. 1945), it was found to be of 18 and 20 days in two nests.

Nesting details of Green bee eater

Nest number-1.

- 08th April 2007: First egg was laid.
- 10th April 2007: Second was laid.
- 12th April 2007: Third egg was laid.
- 15th April 2007: Fourth egg was laid.
- 30th April 2007: First egg hatched in the afternoon.
- 02nd May 2007: Second egg hatched in the afternoon.
- 04th May 2007: Third egg hatched in the evening.
- 05th May 2007: Fourth egg hatched in the morning.
- 22nd May 2007: First chick fledged from nest.
- 23rd May 2007: Second and third chicks fledged from nest
- 24th May 2007: Third chick fledged from the nest.
- 31st May 2007: Fourth chick fledged from the nest.

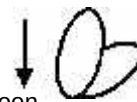
All four chicks returned to the nest for roosting during the nights from 31st May 2007 to 02nd June 2007.

Nest number-2.

- 19th April 2007: First egg was laid.
- 21st April 2007: Second egg was laid.
- 23rd April 2007: Third egg was laid.



- 25th April 2007: Fourth egg was laid.
- 29th April 2007: Fifth egg was laid.
- 11th May 2007: First egg hatched in the afternoon.
- 12th May 2007: Second egg hatched in the evening.
- 14th May 2007: Third egg hatched in the afternoon.
- 16th May 2007: Fourth egg hatched in the morning.
- 17th May 2007: Fifth egg hatched in the evening.
- 06th June 2007: First chick fledged from the nest.
- 08th June 2007: Second chick fledged from the nest.
- 11th June 2007: Third and fourth chicks fledged from the nest.
- 13th June 2007: Fifth chick fledged from the nest.



Nestling

The newly hatched chick was naked, pink in colour, having prominent black coloured eye ball. The eyes of the chick open by the 4th day of hatching. As the eggs hatched asynchronously, the size of the chicks also varies. Brooding began from the first chick.

The frequency of feeding the chicks was higher in the morning. Food fragments such as exoskeleton of beetles and other insects, parts of dragonflies etc were found inside the nest.

One of the parents was observed guarding and brooding chicks up to the night of 6th day, from the hatching of the last egg. As the fecal matters are not removed by the adults, the chamber became very dirty and bad smell was emanating. Some times we observed black coloured ants, houseflies and some unknown small beetles wandering into the nest.

Feeding

In all, three adults were observed feeding the chicks one by one at three nests. Food material observed during feeding the chicks were dragonflies, beetles, butterflies, grasshopper, honey-bees and other unknown insects etc. Dragonfly was the most preferred food item. Some times adults were observed catching water striders at the surface of the apart from small fishes. When the adult birds came with food, first they gave a call to the chicks from their perching site. The hungriest chick came forward up to the entrance of the nest, begging for food. The adult at once fed the chick and flew away immediately, whilst the chick grabbed the food and retreated to the chamber. While the well-fed chicks remained at the far end of the nest, the chicks that were hungry were noticed creeping forward and forward towards the entrance to get their share of the food. The birds were very alert during the feeding periods.

Fledging

In all the observed nests we found that sizes of the chicks varied, and therefore, they fledged on different days. The fledglings were observed in the vicinity and the parents continued to feed them. Fledglings had faint yellowish coloured throat and belly. All the chicks fledged in the mornings. At nest number 1, we observed the fledglings returning to the nest for roosting at night. This type of behaviour was observed in only nest number 1.

Fledging period is considered, as defined by Skutch, to be the period from the hatching of the last egg of a clutch to the fledging

of the last chick (Skutch, A.F. 1945), it was found to be 26 and 27 days.

Breeding success

Due to birds' co-operative strategy and maximum availability of food material, it had high breeding success. In 2005 we observed three eggs accidentally falling from the nest during the departure of the incubating bird at two nesting sites. The nest tunnels were directed upwards and therefore the eggs had fallen from the nests. On account of the birds nesting in tunnels, the predation is very rare as compared with open nests. In none of the observed nests, infertile eggs were observed and all the eggs were hatched. Chick starvation was not observed in the eight nests studied.

Conclusion

We have presented the breeding biology of Green bee-eater from Chiplun city, Ratnagiri district, Maharashtra, India. Both the birds take part in nest excavation, incubation, feeding and care of the chicks. Incubation period of Green bee-eater is 18 and 20 days and fledging period is 26 and 27 days respectively in the two nests studied by us. Brooding is carried out up to the night of 6th day, from the hatching of the last egg. Co-operative strategy in nest excavation and feeding was observed in our study.

An interval of one to three days during each egg laying was observed in this study. The incubation began from the first night on laying the first egg.. Hatching took place asynchronously.

New born chick is naked pink in colour. All chicks were fledged in the mornings.

The Green bee-eater had high breeding success due to the maximum availability of their food and minimum predation. In all nesting success was found to be satisfactory.

Acknowledgment:

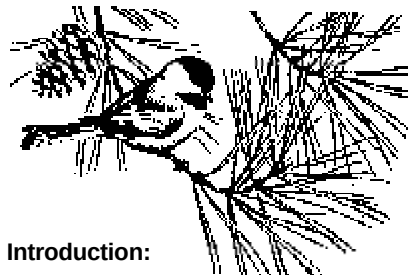
We thank Mr. Ram Vasudeo Mone and Professor Harish Babar, D.B.J. College, Chiplun for their most valuable guidance and support.

References:

1. Ali Salim (1996). Book of Indian Birds
2. Ali Salim and Ripley S. Dillon (2001). Handbook of Birds of India and Pakistan, Paperback Ed. Oxford University Press, Delhi. Vol.4.
3. A.K. Bannerjee (12/1992). Some observations on the breeding behaviour of Bluebearded Bee eater and Indian Small Green Bee eater (19-21). *Zoos Print*.
4. K.M. Nurul Huda (1996). Some observations on the nesting activities of Chestnut-Headed Bee eater *Merops leschenaultia* and Small Green Bee eater *Merops orientalis* in Chittagong, Bangladesh. *Forktail* 12 (155-156).
5. Raju Kasambe (2004). Breeding behaviour of Blue-tailed Bee-eater *Merops philippinus* in central India. Newsletter for Birdwatchers. Vol.45, No. 01, 10-13.
6. Skutch Alexander F. (1945). Incubation and nestling periods of Central American Birds. *Auk* Vol. 62.

Some observations of sightings and occurrence of Black-winged/ White-naped Tit *Parus nuchalis* in Southern Rajasthan

Shailendra Tiwari, Shanti Niketan, Opp. Arihant Apartments, Bedla-Badgaon Link Road, Udaipur-313014 (Rajasthan) email-shailendratwa@gmail.com



Introduction:

Parus nuchalis is found mainly in the northwestern part of the country. It is a resident bird subject to local movements. It has two isolated populations in north and south India. Its best-known range is reported to be restricted to western India including Kutch, north Gujarat and south central Rajasthan. The second south Indian range is in Eastern Ghats, west of Nellore in Andhra Pradesh, west central and south Karnataka and northern Tamil Nadu. In these areas, it is rather patchily distributed (Ali and Ripley, 1981).

The sighting records of the *P. nuchalis* in Rajasthan (as per the information available on the Internet) date back from 1873, near Sambar Lake, near Jaipur to 2004 in the Khas Oudhi, south west of Pichola Lake, Udaipur (Mehra 2004). If we draw a hypothetical line on the basis of the occurrence of *P. nuchalis*, it will diagonally be from northeast to southwest Rajasthan keeping the eastern flank of the Aravali hills. According to Tiwari (2001), the *P. nuchalis* is mainly distributed in seven districts

of Rajasthan, namely Pali, Jodhpur, Jalore, Sirohi, Ajmer, Jaipur and Nagaur.

In Gujarat the records of this species range from 1870, in the Banaskantha area (Butler 1875) to Deomuria in soneri hill and in village Moti Virani in Kutch (Tiwari, 2006). In the south the records range from late 19th century (Jerdon, 1862-64 and butler 1875-77) in Bangalore to Mudumalai wildlife reserve (Bishop, 1998)

P. nuchalis has undergone a rapid population decline in the recent past. Its tiny, fragmented population continues to decline. Presently it is classified as a globally threatened Red Data species (Grimmett, 2000). The decline is attributed to the degradation and loss, of thorny scrub habitat.

Following is an account of the sightings of this bird stretched over a period of five years. The sightings of this bird are not so common but at the same time, it could be seen at different places in and around Udaipur district in southern Rajasthan.

Sl. no	Place of sighting	Habitat description	Date of sighting
1	Forest area-adjoining temple of Jal Burja, at the shore of lake Pichola Udaipur.	Thorny dry deciduous scrub	9th January 2000
2	Forest area adjacent to military cantonment, near the shore of lake Pichola Udaipur.	Thorny dry deciduous scrub	27th July 2000
3.	Forest area adjacent to military cantonment, near the shore of lake Pichola Udaipur.	Thorny dry deciduous scrub	23rd November 2000
4	Village Barawa, Tehsil Nathdwara, Distt. Rajsamand	Scrub mixed with evergreen trees in the vicinity of agricultural fields.	4th April 2003
5	Forest area adjacent to military cantonment, near the shore of lake Pichola Udaipur.	Thorny dry deciduous scrub	13th February 2005
6	At Shanti Niketan Colony, Bedla-Badgaon Link Road, Udaipur	On the dry decaying wood of <i>Allanthur excelsa</i>	24th February 2005
7	At Shanti Niketan Colony, Bedla-Badgaon Link Road, Udaipur	On <i>Acasia nilotica</i> tree surrounded by buildings and empty plots.	5th February 2006

Sightings reported by other authors in the southwestern Rajasthan in the recent years:

Sl. no	Place of sighting	Habitat description	Date of sighting	Author
1	Malgarh ki chowki near Ranakpur Jain temple, Distt. Pali	Broad leaf thick forest intermingled with thorny dry deciduous one	22 nd June 2004	Raza H. Tehsin (2000)
2.	Khas Oudhi, south west of lake Pichola, Udaipur	Thorny dry deciduous acacia scrub	24 th May 2004	Satya Prakash Mehra (2004)
3.	Sajjanganrh wildlife sanctuary, Udaipur	Thorny dry deciduous acacia scrub	27 th July 2000	Dr. Satish Kr. Sharma (2004)
4.	Forest Range Campus Deola, Distt. Udaipur	Broad leaf thick forest intermingled thorny dry deciduous one	1 st July 2001	Dr. Satish Kr. Sharma (2004)

Detailed Description of the habitat where the *P. nuchalis* was located

Forest area near military cantonment, Jal Burja

The terrain has moderate to steep sloppy with patches of stony surface. It accommodates dry deciduous thorny trees like Dhok (*Anogeissus pendula*), Desi babool (*Acacia nilotica*) Kher (*Acacia catechu*), Ronjh (*Acacia leucophloea*), Salar (*Boswellia serrata*) Dhawad (*Angeissues latifolia* etc. There is some growth of *Lantana camara* and other shrubs mainly *Zizyphus xylopyrus* on the edges. The area spreads in single contiguous stretch of around 3 kms on the southern and western shores with ingressions of Lake Pichola.

Village Barawa :

The village is situated in a valley towards northwest of Udaipur city. Here, agricultural fields are intermingled with the patches of scrub dry non-cultivable land (which could be more than 50% of the total area). Some of the fields have access to irrigation. There is a perennial *nullah* (rivulet) flowing across the village. The trees found in this area are *Acacia nilotica*, Ber (*Zizyphus mauritiana*), *Angeissues latifolia*, Mango (*Mangifera indica*), Neem (*Azadirachta indica*) etc.

Shanti Niketan Colony, Bedla-Badgaon Link Road, Udaipur:

It is a fast developing residential area near Badgaon village towards west of Udaipur city. The newly occurred human

settlement is intercepted with agricultural fields and groves of trees. The species of trees available include *Acacia nilotica*, *Ailanthus excelsa*, *Ficus religiosa*, *Eucalyptus spp.*

Sightings in the light of contemporary discussions:

According to eminent ornithologist, forester and naturalist Dr. Satish Sharma, *P. nuchalis* is a typical dry deciduous forest loving species. Over the years there has been enormous development of this type of habitat in and around Udaipur district. Here, due to biotic pressure and recurrent droughts, the broad leaf mixed forest is being rapidly replaced by dry thorny deciduous scrub forest. Due to development of preferable habitat, there has been movement of this species from north to southwards along with the fringes. There are no authentic records of regular sighting of *P. nuchalis* up to late eighties in Udaipur district. Its appearance has definitely increased after 90s. Nevertheless it is a matter of concern that its habitat (dry scrub forest) is being further depleted too, at an alarmingly faster pace.

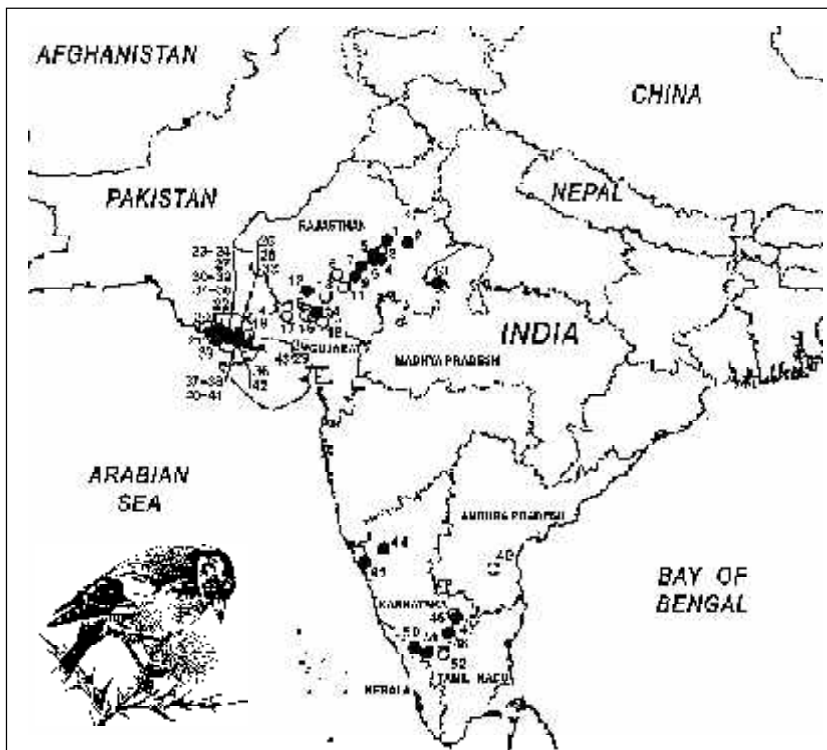
Another interesting feature of the area is presence of both *P. major* (Grey Tit) and *P. nuchalis* in the same habitat; often on the same day and same time. The same phenomenon has been reported by Tiwari (in prep) in Balaram and Jethi forest areas of north Gujarat and Sundamata hill, Maroth and Sambar in Rajasthan and in Madumalai in deep south.

Acknowledgment

I sincerely thank Shri Jugal Tiwari, Centre for Desert and Ocean, Village Moti Virani, Kutch 370665 (Gujarat) and Dr. Satish Kumar Sharma, Range Forest Officer, Sajjangarh Wildlife Sanctuary, Udaipur for their valuable guidance in putting up this article in its present shape.

Reference

1. Ali and S. Dillon Ripley (1986) Hand book of Birds of India and Pakistan
2. S. Dillon Ripley (1982) A synopsis of Birds of India and Pakistan (II ed)
3. Grimmet Richard, Carol Inskipp and Tim Inskipp (1998), Birds of Indian subcontinent, Oxford University Press
4. Mehra S (2004) Web based information. www.rdb.or.id/viewadd.php?id=298
5. Sharma S (2004) New sight records of pied tit *Parus nuchalis* in Rajasthan. *J.Bombay Nat.Hist Soc.* 101 (1): 162
6. Tehsin Raza (2000) cited from Sharma S (2004) New sight records of pied tit *Parus nuchalis* in Rajasthan. *J.Bombay Nat.Hist Soc.* 101 (1): 162
7. Tiwari J.K. (2001): Status and distribution of the white naped Tit *Parus nuchalis* in Gujarat and Rajasthan *J.Bombay Nat.Hist Soc.* 98(1)



The distribution of White-naped Tit *Parus nuchalis*: (1) Sambhar; (2) Kanota; (3) Kishengur; (4) Ajmer; (5) Nasirabad; (6) Ramsar; (7) Sendra Reserve Forest; (8) Pali; (9) Todgarh; (10) Bar; (11) Desuri; (12) Jalore; (13) Sirohi; (14) Balam; (15) Deesa; (16) Gangasagar; (17) Suigam; (18) Taranga hill; (19) Koonria; (20) Davapar; (21) Baranda; (22) Matanomadh; (23) Vigodi; (24) Vedhar camp; (25) Doria; (26) Moti-Aral; (27) Payya; (28) Piyoni temple; (29) Soomrasir; (30) Dhinodhar; (31) Jathavira; (32) Sanamath; (33) Adochani dam; (34) Pakhda hill; (35) Virani; (36) Godsar; (37) Bhuj; (38) Bolarihar; (39) Naliya; (40) Tapkeshwari; (41) Chaduva; (42) Madhapur; (43) Fulay; (44) Dharwad; (45) Anshi National Park; (46) Bangalore; (47) Dommasandra; (48) Kaveri river; (49) Veliconda range; (50) Wynaad district; (51) Masnigudi; (52) Satyamangala.

O Historical (pre-1950), O Fairly recent (1950-1979), • Recent (1980-present) • Undated

An avifaunal study of Malleswara Gudda and its environs

P. Guruprasad, 70, 7th Cross, 3rd Main, 'M' Block, Dattagalli, Vivekanandanagar, Mysore-570023. guruprasadp_engr@yahoo.co.in

Vijayalaxmi, Muddanahalli, Naviluru Post, Nanjanagudu, Mysore

D.H.Tanuja, LIG #1, 4th Main, Ramakrishnanagar 'I' Block, Mysore- 570 023. tanudh@yahoo.co.in, tanujadh@gmail.com

(Corresponding author)

Introduction:

The study area consists of Malleswara gudda and its surroundings, which is situated at an aerial distance of 15 km from Mysore City, Karnataka. The entire 700 sq km area includes patches of thorn-scrub, Kapila River, many lakes and tanks, a few hills and agriculture fields. The area under observation is visited frequently as part of the annual Mid-winter Asian Waterfowl census since 1989. Besides available information, the birds monitored and enumerated during different seasons at different habitat types are reflected in the present report. A total of 240 species have been recorded. The present study is an effort to evaluate the habitat with special reference to birds.

Study Area:

The study area (12° 02' - 12° 18' N and 76° 18' - 76° 35' E) is located in Heggadadevana Kote, Hunsur and Nanjanagudu Taluks of Mysore district, Karnataka state. Altitude ranges from 700 to 845m. Temperature ranges from 16 ° to 34 °C and rainfall

is 795 mm (50 years average, Suryanath 1988). It encompasses different habitats like thorn-scrub, forest patches [Arabithittu - designated Important Bird Area: KA-36 (Islam 2005), Chickanahalli, Malleswara Gudda, Gujjegowdanapurada Gudda, river Kapila, tanks and lakes (Hebballa, Karigala, Karimuddanahalli, Bilikere, Kenchanakere and Vadavinakatte) and cultivated fields (rain fed, irrigated, plantations and hedges). The vegetation is described as thorn-scrub with few elements of dry-deciduous forests (Saldanha 1984, Rao & Razi 1981). Non-forest habitat is due to prolonged disturbance of deciduous forest over a long period. These thorn-scrub protected areas are located amidst vast open and fallow land, as well as cultivated land, town and villages. A small number each of extremely rare plants like, *Iphigenia indica*, *Buchnera hispida*, *Madhuca indica*, *Opilia amentacea*, *Maeruva spp*, *Capparis stylosa* are still surviving here. Similarly thin population of *Bridelia retusa*, *Ximenia americana*, *Milius tomentosa*, *Lagerstroemia parviflora*, *Ventilago maderaspatana*, and *Soyamida fabrifuga* exists here. Nagarahole and Bandipur

National Parks are situated at a distance of 18 & 25 kms, respectively, from the centre of the study area.

Methodology:

The waterbodies in the present study area are visited regularly during annual Mid-winter Asian Waterfowl Census since 1989. Trails in marked transect in search of flora and fauna was carried out regularly on an average of twice a month. Study is conducted using visual census techniques along line transect in varied vegetation. Identification is based on Ali (1983) and Grimmett (1999), scientific names are after Grimmett (1999).

Results:

Observation of Tawny Eagles *Aquila rapax* breeding (Shivaprakash *et al* 2006); occurrence of the Northern Goshawk *Accipiter gentilis* (Thejaswi and Shivaprakash 2004); occurrence of the Eastern Imperial Eagle *Aquila heliaca* (Thejaswi and Shivaprakash 2004); wide distribution of Greater spotted Eagle *Aquila clanga* (Thejaswi and Shivaprakash 2004); presence of Yellow-throated Bulbul *Pycnonotus xantholaemus* (Thejaswi 2004); incidence of Pallid Harrier *Circus macrourus*, Montagu's Harrier *C. pygargus*, Western Marsh Harrier *C. aeruginosus*, Pied Harrier *C. melanoleucos*, Amur Falcon *Falco amurensis* and Lesser Kestrel *Falco naumanni* (Thejaswi *et al* 2004); rare Western Reef Egret *Egretta gularis*, Comb Duck *Sarkidiornis melanotos*, Ruddy Shelduck *Tadorna ferruginea* (Wetlands International) are well recorded.

Checklist of recorded avifauna is voluminous; 240 species of birds from 64 families [parallel study resulting in recording 446 species of flowering plants spread over 71 families (*under prep*- Sampathkumara K.S. and Sadananda K.B), and 121 species of butterflies from 5 families (*under prep*- Kishendas K.R)]. The rich bio-diversity can be attributed to lower population density of 194 persons per sq Km, location of two national parks nearby and healthy waterbodies.

Normally, during rainy season (June-September) birds like Brown backed Needle-tail (*Hirundapus giganteus*), Lorikeet (*Loriculus vernalis*), Plum-headed Parakeet (*Psittacula cyanocephala*) from nearby Bandipur, Nagarhole forest stretches visit this place as an extended foraging ground.

Birds like, Oriental Skylark (*Alauda gulgula*), Sykes Lark (*Galerida deva*) and Rufous-tailed Larks (*Ammomanes phoenicurus*) are regulars during rainy season; during winter and summer they spread out to nearby Krishnarajasagar (IBA, KA-18), Yennehole and Kalale kere.

Globally threatened and vulnerable bird, Yellow-throated Bulbul *Pycnonotus xantholaemus*, which is endemic to southern peninsular India, is a resident here. Critically endangered, Oriental White-backed Vulture *Gyps bengalensis* breeds in the nearby Alanahalli village limits (Birdlife International 2001).

All the birds recorded are tabled in annexure-1, threatened birds in annexure-2 and List of important areas studied in annexure -3

Conclusion:

A single stretch of thorn-scrub forest that was covering the entire Arasanakatte, Bettada beedu, Kallalli, Javarayanahundi and

Malleswara gudda is disintegrated into isolated patches. Species richness has considerably decreased with the conversion of natural thorn-scrub forest to cultivated lands. Surviving plants, mammals, birds, butterflies and other forms of living beings have no other alternative than these isolated patches.

Adverse effect is inevitable on the existing bio-diversity due to proposed coal based thermal generating station. Most pressing demands in the present stage of social development is protecting the environment and making proficient utilization of natural resources. The task of preserving the purity of the atmosphere and water basins is of both national and global significance since there are no boundaries to the propagation of anthropogenic contaminants in the atmosphere. So, there is an immediate need for stopping such detrimental projects and try alternate eco-friendly way of generating electricity.

Acknowledgment:

We express our sincere thanks to K.B.Sadanand, K.K. Sampthkumara for identifying the plants. We are grateful to A. Shivaprakash and K.R. Kishendas for the preparation of manuscript and helpful suggestions. We also thank B.R. Sheshagiri, T. Girija, M. Sahana, and other friends who accompanied us on our field trips.

Reference

- Birdlife International Red data book. Vol.1. Threatened Birds of Asia: BirdLife International, Cambridge, UK
- Grimmett, R. C. Inskipp & T. Inskipp (1999): Birds of the Indian Subcontinent. Oxford University press, New Delhi
- Islam, M.Z. & A.R. Rahmani (2005): Important Bird Areas in India: Priority sites for conservation. Mumbai: Indian Bird Conservation Network: Bombay Natural History Society and BirdLife International (UK)
- Rao, R.R & Razi, B.A.1981. A synoptic flora of Mysore district, Today & Tomorrow's printers and publishers, New Delhi: pp.20- 22
- Saldanha, C.J.(1984): Flora of Karnataka, Vol I. Oxford and IBH publishing Co., Mumbai.
- Shivaprakash.A, Kishen Das. K.R, Thejaswi Shivanand, Girija.T & Sharath. A. Notes on the breeding of the Indian Spotted Eagle *Aquila hastata*. Indian Birds Vol.2(1):2-4
- Suryanath U. Kamath (Ed) 1988. Karnataka state Gazetteer, Mysore District, Government press, Bangalore.
- Thejaswi, S. 2004. New sites for the globally threatened Yellow-throated Bulbul in Karnataka, Kerala and Tamilnadu, Southern India. *J. Bombay Nat. Hist. Soc.* 101(3): 458-460
- Thejaswi.S & Shivaprakash.A. Occurrence of the Northern Goshawk *Accipiter Gentilis* in and near Mysore, Karnataka. *J.Bombay Nat. Hist. Soc.* 101(3): 446
- Thejaswi.S & Shivaprakash.A. The Eastern Imperial Eagle *Aquila heliaca* near Mysore, Southern India, *J.Bombay Nat. Hist. Soc.* 101(3): 447
- Thejaswi.S & Shivaprakash.A. Status of the Greater Spotted Eagle *Aquila clanga pallas* in the wetlands of the Kaveri basin of Karnataka. *J. Bombay Nat. Hist. Soc.* 101(3): 447-449
- Thejaswi.S, Shivaprakash.A, & Mohan Kumar. 2004. A note on Harrier roosts in the Mysore area. *J.Bombay Nat. Hist. Soc.* 101(3): 450-451
- Thejaswi.S, Srihari Sastry, Shivaprakash.A, & Mohan Kumar. 2004. Occurrence of Amur Falcon and Lesser Kestrel in Mysore, Karnataka. *J. Bombay Nat. Hist. Soc.* 101(3): 451-452
- Wetlands International (1993-2002). Waterbird Population Estimates, overview of the status of wetlands in Asia. Wetlands International.

ANNEXURE -1

List of birds recorded within 15 km radius of
Malleswaragudda, HD Kote Taluk, Mysore dt, Karnataka

Grebbs		Podicipedidae	Status	
1	Little Grebe	<i>Tachybaptus ruficollis</i>	B A	
Pelicans		Pelecanidae		
2	Spot-billed Pelican	<i>Pelecanus philippensis</i>	R C	
Cormorants/Shags		Phalacrocoracidae		
3	Little Cormorant	<i>Phalacrocorax niger</i>	B C	
4	Indian Shag	<i>Phalacrocorax fuscicollis</i>	B C	
5	Great Cormorant	<i>Phalacrocorax carbo</i>	B C	
Darters		Anhingidae		
6	Darter	<i>Anhinga melanogaster</i>	B C	
Herons, Egrets & Bitterns		Ardeidae		
7	Little Egret	<i>Egretta garzetta</i>	B C	
8	Western Reef-Egret	<i>Egretta gularis</i>	WV U	
9	Grey Heron	<i>Ardea cinerea</i>	B C	
10	Purple Heron	<i>Ardea purpurea</i>	B C	
11	Large Egret	<i>Casmerodius albus</i>	R C	
12	Median Egret	<i>Mesophoyx intermedia</i>	R C	
13	Cattle Egret	<i>Bubulcus ibis</i>	B A	
14	Indian Pond-Heron	<i>Ardeola grayii</i>	B A	
15	Little Green Heron	<i>Butorides striatus</i>	R U	
16	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	R U	
17	Yellow Bittern	<i>Ixobrychus sinensis</i>	R Ra	
18	Chestnut Bittern	<i>Ixobrychus cinnamomeus</i>	V Ra	
Storks		Ciconiidae		
19	Painted stork	<i>Mycteria leucocephala</i>	R C	
20	Asian Openbill-Stork	<i>Anastomus oscitans</i>	R C	
21	White-necked stork	<i>Ciconia episcopus</i>	WV C	
22	European White stork	<i>Ciconia ciconia</i>	WV Ra	
Ibises & Spoonbills		Threskiornithidae		
23	Glossy Ibis	<i>Plegadis falcinellus</i>	WV C	
24	Oriental White Ibis	<i>Threskiornis melanoleucus</i>	R C	
25	Black Ibis	<i>Pseudibis papillosa</i>	B C	
26	Eurasian Spoonbill	<i>Platalea leucorodia</i>	R U	
Swans, Geese & Ducks		Anatidae		
27	Lesser Whistling-Duck	<i>Dendrocygna javanica</i>	B C	
28	Bar-headed Goose	<i>Anser indicus</i>	WV U	
29	Brahminy Shelduck	<i>Tadorna ferruginea</i>	WV Ra	
30	Comb Duck	<i>Sarkidiornis melanotos</i>	R Ra	
31	Cotton Teal	<i>Nettapus coromandelianus</i>	R C	
32	Eurasian Wigeon	<i>Anas penelope</i>	WV U	
33	Spot-billed Duck	<i>Anas poecilorhyncha</i>	B A	
34	Northern Shoveller	<i>Anas clypeata</i>	WV C	
35	Northern Pintail	<i>Anas acuta</i>	WV C	
36	Garganey	<i>Anas querquedula</i>	WV C	
37	Common Teal	<i>Anas crecca</i>	WV C	
38	Common Pochard	<i>Aythya ferina</i>	WV U	
Hawks, Eagles, Buzzards, Old World Vultures, Kites, Harriers		Accipitridae		
39	Oriental Honey-Buzzard	<i>Pernis ptilorhynchus</i>	B C	
40	Black-shouldered Kite	<i>Elanus caeruleus</i>	B C	
41	Black Kite	<i>Milvus migrans</i>	B A	
42	Brahminy Kite	<i>Haliastur indus</i>	B A	
43	Egyptian Vulture	<i>Neophron percnopterus</i>	R C	
44	Indian White-backed Vulture	<i>Gyps bengalensis</i>	B U	
45	Long-billed Vulture	<i>Gyps indicus</i>	V Ra	
46	Short-toed Snake-Eagle	<i>Circus gallicus</i>	B C	
47	Crested Serpent-Eagle	<i>Spilornis cheela</i>	WV U	
48	Western Marsh-Harrier	<i>Circus aeruginosus</i>	WV C	
49	Hen Harrier	<i>Circus cyaneus</i>	WV Ra	
50	Pallid Harrier	<i>Circus macrourus</i>	WV Ra	
51	Pied Harrier	<i>Circus melanoleucos</i>	WV Ra	
52	Montagu's Harrier	<i>Circus pygargus</i>	WV Ra	
53	Shikra	<i>Accipiter badius</i>	B C	
54	Eurasian Sparrowhawk	<i>Accipiter nisus</i>	WV U	
55	Northern Goshawk	<i>Accipiter gentilis</i>	WV Ra	
56	White-eyed Buzzard	<i>Butastur teesa</i>	B C	
57	Indian Spotted Eagle	<i>Aquila hastata</i>	R C	
58	Greater Spotted Eagle	<i>Aquila clanga</i>	WV C	
59	Tawny Eagle	<i>Aquila rapax</i>	B C	
60	Bonelli's Eagle	<i>Hieraetus fasciatus</i>	B C	
61	Booted Eagle	<i>Hieraetus pennatus</i>	WV U	
Osprey		Pandionidae		
62	Osprey	<i>Pandion haliaetus</i>	WV U	
Falcons		Falconidae		
63	Lesser Kestrel	<i>Falco naumanni</i>	WV U	
64	Common Kestrel	<i>Falco tinnunculus</i>	WV C	
65	Red-headed Falcon	<i>Falco chicquera</i>	R U	
66	Amur Falcon	<i>Falco amurensis</i>	V Ra	
67	Laggar Falcon	<i>Falco jugger</i>	V Ra	
68	Peregrine Falcon	<i>Falco peregrinus</i>	V Ra	
Pheasants, Partridges, Quails		Phasianidae		
69	Grey Francolin	<i>Francolinus pondicerianus</i>	B C	
70	Jungle Bush-Quail	<i>Perdica asiatica</i>	B C	
71	Rock Bush-Quail	<i>Perdica argoondah</i>	B C	
72	Grey Junglefowl	<i>Gallus sonneratii</i>	B C	
73	Indian Peafowl	<i>Pavo cristatus</i>	B C	
Buttonquails/Bustardquails		Turnicidae		
74	Small Buttonquail	<i>Turnix sylvatica</i>	R U	
75	Common Buttonquail	<i>Turnix suscitator</i>	R U,	
Crakes, Moorhens, Coots		Rallidae		
76	Slaty-legged Crake	<i>Rallina eurizonoides</i>	V Ra	
77	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	B C	
78	Baillon's Crake	<i>Porzana pusilla</i>	WV C	
79	Ruddy-breasted Crake	<i>Porzana fusca</i>	B C	
80	Purple Moorhen	<i>Porphyrio porphyrio</i>	B A	
81	Common Moorhen	<i>Gallinula chloropus</i>	B C	
82	Common Coot	<i>Fulica atra</i>	B A	
Jacanas		Jacanidae		
83	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	B A	
84	Bronze-winged Jacana	<i>Metopidius indicus</i>	B A	
Painted-Snipes		Rostratulidae		
85	Greater Painted-Snipe	<i>Rostratula benghalensis</i>	B U	
Plovers, Dotterels, Lapwings		Charadriidae		
86	Little Ringed Plover	<i>Charadrius dubius</i>	WV C	
87	Kentish Plover	<i>Charadrius alexandrinus</i>	WV U	
88	Yellow-wattled Lapwing	<i>Vanellus malabaricus</i>	B C	
89	Red-wattled Lapwing	<i>Vanellus indicus</i>	B A	
Sandpipers, Stints, Snipes, Godwits & Curlews		Scolopacidae		
90	Pintail snipe	<i>Gallinago stenura</i>	WV C	
91	Common snipe	<i>Gallinago gallinago</i>	WV C	
92	Jack snipe	<i>Lymnocyrtus minimus</i>	WV U	
93	Black-tailed Godwit	<i>Limosa limosa</i>	WV U	
94	Common Redshank	<i>Tringa totanus</i>	WV C	
95	Marsh sandpiper	<i>Tringa stagnatilis</i>	WV C	
96	Common Greenshank	<i>Tringa guttifer</i>	WV C	
97	Green Sandpiper	<i>Tringa ochropus</i>	WV C	
98	Wood Sandpiper	<i>Tringa glareola</i>	WV A	
99	Common Sandpiper	<i>Actitis hypoleucos</i>	WV A	
100	Little Stint	<i>Calidris minuta</i>	WV A	
101	Temminck's Stint	<i>Calidris ruficollis</i>	WV C	
102	Ruff	<i>Philomachus pugnax</i>	WV Ra	
Ibisbill, Avocets & Stilts		Recurvirostridae		
103	Black-winged Stilt	<i>Himantopus himantopus</i>	WV A	



Stone-Curlew & Stone-Plovers/Thick-knees

Burhinidae			
104 Stone-Curlew	<i>Burhinus oedicnemus</i>	B	C
Couriers & Pratincoles			
105 Small Pratincole	<i>Glareola lactea</i>	R	U
Gulls, Terns & Noddies			
106 Brown-headed Gull	<i>Larus brunnicephalus</i>	WV	Ra
107 River Tern	<i>Sterna aurantia</i>	WV	C
108 Black-bellied Tern	<i>Sterna acuticauda</i>	V	Ra
109 Whiskered Tern	<i>Chlidonias hybridus</i>	WV	C
Pigeons & Doves			
110 Blue Rock Pigeon	<i>Columba livia</i>	B	A
111 Little Brown Dove	<i>Streptopelia senegalensis</i>	B	A
112 Spotted Dove	<i>Streptopelia chinensis</i>	B	A
113 Eurasian Collared-Dove	<i>Streptopelia decaocto</i>	B	A
114 Yellow-leg Green-Pigeon	<i>Treron phoenicoptera</i>	R	U
Parakeets & Hanging-Parrots			
115 Vernal Hanging-Parrot	<i>Loriculus vernalis</i>	SV	U
116 Rose-ringed Parakeet	<i>Psittacula krameri</i>	B	A
117 Plum-headed Parakeet	<i>Psittacula cyanocephala</i>	SV	U
118 Blue-winged Parakeet	<i>Psittacula columboides</i>	SV	U
Cuckoos, Malkohas & Coucals			
119 Pied Crested Cuckoo	<i>Clamator jacobinus</i>	B	U
120 Large Hawk-Cuckoo	<i>Hierococcyx sparverioides</i>	SV	U
121 Brainfever Bird	<i>Hierococcyx varius</i>	SV	U
122 Indian Plaintive Cuckoo	<i>Cacomantis passerinus</i>	WV	U
123 Asian Koel	<i>Eudynamis scolopacea</i>	B	A
124 Small Green-bill Malkoha	<i>Phaenicophaeus viridirostris</i>	B	C
125 Sirkeer Malkoha	<i>Phaenicophaeus leschenaultii</i>	B	Ra
126 Greater Coucal	<i>Centropus sinensis</i>	B	C
Barn Owls			
127 Barn Owl	<i>Tyto alba</i>	B	U
Owls			
128 Eurasian Eagle-Owl	<i>Bubo bubo</i>	B	U
129 Mottled Wood-Owl	<i>Strix ocellata</i>	B	U
130 Spotted Owlet	<i>Athene brama</i>	B	C
Nightjars			
131 Indian Jungle Nightjar	<i>Caprimulgus indicus</i>	B	U
132 Common Indian Nightjar	<i>Caprimulgus asiaticus</i>	B	U
Swifts			
133 Indian Edible-nest Swiftlet	<i>Collocalia unicolor</i>	SV	U
134 White-rumped Needletail	<i>Zoonavena sylvatica</i>	SV	U
135 Brown-backed Needletail-Swift	<i>Hirundapus giganteus</i>	SV	U
136 Asian Palm-Swift	<i>Cypsiurus balasienis</i>	B	C
137 Alpine Swift	<i>Tachymarptis melba</i>	SV	U
138 House Swift	<i>Apus affinis</i>	B	C
Kingfishers			
139 Small Blue Kingfisher	<i>Alcedo atthis</i>	B	U
140 White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	B	C
141 Lesser Pied Kingfisher	<i>Ceryle rudis</i>	B	U
Bee-eaters			
142 Small Bee-eater	<i>Merops orientalis</i>	B	C
143 Blue-tailed Bee-eater	<i>Merops philippinus</i>	WV	C
144 Chestnut-headed Bee-eater	<i>Merops leschenaulti</i>	WV	Ra
Rollers			
145 Indian Roller	<i>Coracias benghalensis</i>	B	C
Hoopoes			
146 Common Hoopoe	<i>Upupa epops</i>	B	C
Hornbills			
147 Indian Grey Hornbill	<i>Ocyroceros birostris</i>	B	C
Barbets			
148 White-cheeked Barbet	<i>Megalaima viridis</i>	B	C
149 Coppersmith Barbet	<i>Megalaima haemacephala</i>	B	C
Woodpeckers			
150 Yellow-fronted Pied Woodpecker	<i>Dendrocopos mahrattensis</i>	SV	Ra
151 Lesser Golden-backed Woodpecker	<i>Dinopium benghalense</i>	R	U



152 Black-shouldered Woodpecker	<i>Chrysocolaptes festivus</i>	R	U
Pittas			
153 Indian Pitta	<i>Pitta brachyura</i>	WV	U
Larks			
154 Singing Bush-Lark	<i>Mirafraga cantillans</i>	R	Ra
155 Red-winged Bush-Lark	<i>Mirafraga erythroptera</i>	B	U
156 Jerdon's Bush-Lark	<i>Mirafraga affinis</i>	B	C
157 Ashy-crowned Sparrow-Lark	<i>Eremopterix grisea</i>	B	A
158 Rufous-tailed Finch-Lark	<i>Ammomanes phoenicurus</i>	R	U
159 Sykes's Crested Lark	<i>Galerida deva</i>	R	U
160 Indian Small Skylark	<i>Alauda gulgula</i>	R	U
Swallows & Martins			
161 Dusky Crag-Martin	<i>Hirundo concolor</i>	R	U
162 Common Swallow	<i>Hirundo rustica</i>	WV	C
163 Wire-tailed Swallow	<i>Hirundo smithii</i>	B	U
164 Red-rumped Swallow	<i>Hirundo daurica</i>	B	C
Wagtails & Pipits			
165 Forest Wagtail	<i>Dendronanthus indicus</i>	WV	Ra
166 White Wagtail	<i>Motacilla alba</i>	WV	U
167 Large Pied Wagtail	<i>Motacilla maderaspatensis</i>	B	C
168 Yellow Wagtail	<i>Motacilla flava</i>	WV	C
169 Grey Wagtail	<i>Motacilla cinerea</i>	WV	U
170 Richard's Pipit	<i>Anthus richardi</i>	WV	Ra
171 Paddyfield Pipit	<i>Anthus rufulus</i>	WV	C
172 Tawny Pipit	<i>Anthus campestris</i>	WV	Ra
173 Blyth's Pipit	<i>Anthus godlewskii</i>	WV	Ra
174 Eurasian Tree Pipit	<i>Anthus trivialis</i>	WV	U
Cuckoo-Shrikes, Flycatcher-Shrikes, Trillers, Minivets, Woodshrikes			
175 Large Cuckoo-Shrike	<i>Coracina macei</i>	SV	Ra
176 Small Minivet	<i>Pericrocotus cinnamomeus</i>	B	C
177 White-bellied Minivet	<i>Pericrocotus erythropygius</i>	R	U
178 Common Woodshrike	<i>Tephrodornis pondicerianus</i>	B	U
Bulbuls & Finchbills			
179 Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	B	A
180 Red-vented Bulbul	<i>Pycnonotus cafer</i>	B	C
181 Yellow-throated Bulbul	<i>Pycnonotus xantholaemus</i>	B	U
182 White-browed Bulbul	<i>Pycnonotus luteolus</i>	B	C
Ioras, Chloropsis/Leafbird, Fairy-Bluebird			
183 Common Iora	<i>Aegithina tiphia</i>	B	C
184 Jerdon's Chloropsis	<i>Chloropsis cochinchinensis</i>	B	U
Shrikes			
185 Brown Shrike	<i>Lanius cristatus</i>	WV	C
186 Bay-backed Shrike	<i>Lanius vittatus</i>	WV	U
187 Rufous-backed Shrike	<i>Lanius schach</i>	B	C
Thrushes, Shortwings, Robins, Forktails, Wheaters			
Turdinae			
188 Blue-head Rock-Thrush	<i>Monticola cinclorhynchus</i>	WV	U
189 Blue Rock-Thrush	<i>Monticola solitarius</i>	WV	U
190 Bluethroat	<i>Luscinia svecica</i>	WV	U
191 Oriental Magpie-Robin	<i>Copsychus saularis</i>	B	C
192 Indian Robin	<i>Saxicoloides fulvicata</i>	B	C
193 Common stonechat	<i>Saxicola torquata</i>	WV	U
194 Pied Bushchat	<i>Saxicola caprata</i>	B	C
Babblers, Laughingthrushes, Babaxes, Barwings, Yuhinas			
Timaliinae			
185 Rufous-bellied Babbler	<i>Dumetia hypertyra</i>	B	C
196 Yellow-eyed Babbler	<i>Chrysomma sinense</i>	B	C
197 Common Babbler	<i>Turdoides caudatus</i>	B	U
198 Large Grey babbler	<i>Turdoides malcolmi</i>	B	C
199 White-headed Babbler	<i>Turdoides affinis</i>	B	C
Goldcrest, Prinias, Tesias, Warblers			
200 Franklin's Prinia	<i>Prinia hodgsonii</i>	B	U
201 Jungle Prinia	<i>Prinia sylvatica</i>	B	U
201 Ashy Prinia	<i>Prinia socialis</i>	B	A

201 Plain Prinia	<i>Prinia inornata</i>	B	C
202 Paddyfield Warbler	<i>Acrocephalus agricola</i>	WV	C
202 Blyth's Reed-Warbler	<i>Acrocephalus dumetorum</i>	WV	C
203 Indian Great Reed-Warbler	<i>Acrocephalus stentoreus</i>	WV	C
203. Booted Warbler	<i>Hippolais caligata</i>	WV	C
204 Common Tailorbird	<i>Orthotomus sutorius</i>	B	C
204 Greenish Leaf-Warbler	<i>Phylloscopus trochiloides</i>	WV	U
205 Common Lesser Whitethroat	<i>Sylvia curruca</i>	WV	U
205 Orphean warbler	<i>Sylvia hortensis</i>	WV	Ra
Flycatchers	Muscicapinae		
207 Asian Brown flycatcher	<i>Muscicapa dauurica</i>	WV	C
208 Tickell's Blue-Flycatcher	<i>Cyornis tickelliae</i>	B	U
Monarch-Flycatchers & Paradise-Flycatchers	Monarchinae		
209 Asian Paradise-Flycatcher	<i>Terpsiphone paradisi</i>	R	U
Fantail-Flycatchers	Rhipidurinae		
210 White-throated Fantail-Flycatcher	<i>Rhipidura albicollis</i>	B	C
Tits	Paridae		
211 Great Tit	<i>Parus major</i>	B	C
Flowerpeckers	Dicaeidae		
212 Thick-billed Flowerpecker	<i>Dicaeum agile</i>	B	U
213 Tickell's Flowerpecker	<i>Dicaeum erythrorhynchos</i>	B	C
Sunbirds & Spiderhunters	Nectariniidae		
214 Purple-rumped Sunbird	<i>Nectarinia zeylonica</i>	B	A
215 Purple Sunbird	<i>Nectarinia asiatica</i>	B	C
White-eyes	Zosteropidae		
216 Oriental White-eye	<i>Zosterops palpebrosus</i>	R	Ra
Buntings	Emberizinae		
217 Red-headed Bunting	<i>Emberiza melanocephala</i>	WV	Ra
Finches	Fringillidae		
218 Common Rosefinch	<i>Carpodacus erythrinus</i>	WV	Ra
Munias (Estrildid Finches)	Estrildidae		
219 Red Munia	<i>Amandava amandava</i>	B	Ra
220 White-throated Munia	<i>Lonchura malabarica</i>	B	C
221 White-rumped Munia	<i>Lonchura striata</i>	B	Ra
222 Spotted Munia	<i>Lonchura punctulata</i>	B	C
Sparrows & Snowfinches	Passerinae		
223 House Sparrow	<i>Passer domesticus</i>	B	C
Weavers	Ploceinae		
224 Streaked Weaver	<i>Ploceus manyar</i>	B	U
225 Baya Weaver	<i>Ploceus philippinus</i>	B	A
Starlings & Mynas	Sturnidae		
226 Grey-headed Starling	<i>Sturnus malabaricus</i>	WV	U
227 Brahminy Starling	<i>Sturnus pagodarum</i>	B	U
228 Rosy Starling	<i>Sturnus roseus</i>	WV	A
229 Common Myna	<i>Acridotheres tristis</i>	B	A
230 Jungle Myna	<i>Acridotheres fuscus</i>	B	C
Orioles	Oriolidae		
231 Eurasian Golden Oriole	<i>Oriolus oriolus</i>	WV	C
232 Black-naped Oriole	<i>Oriolus chinensis</i>	WV	Ra
Drongos	Dicruridae		
233 Black Drongo	<i>Dicrurus macrocercus</i>	WV	C
234 Ashy Drongo	<i>Dicrurus leucophaeus</i>	WV	U
235 White-bellied Drongo	<i>Dicrurus caerulescens</i>	R	Ra
236 Bronzed Drongo	<i>Dicrurus aeneus</i>	WV	Ra
Woodswallow-Shrikes	Artamidae		
237 Ashy Woodswallow	<i>Artamus fuscus</i>	WV	Ra
Crows, Jays, Treepies	Corvidae		
238 Indian Treepie	<i>Dendrocitta vagabunda</i>	R	Ra
239 House Crow	<i>Corvus splendens</i>	B	
C240 Jungle Crow	<i>Corvus macrorhynchos</i>	B	C

ANNEXURE -2**Summary****A CRITICALLY ENDANGERED**

- 1 Oriental White-backed Vulture *Gyps bengalensis*
- 2 Long-billed Vulture *Gyps indicus*

B VULNERABLE

- 1 Spot-billed Pelican *Pelecanus philippensis*
- 2 Great Spotted Eagle *Aquila clanga*
- 3 Eastern Imperial Eagle *Aquila heliaca*
- 4 Yellow-throated Bulbul *Pycnonotus xantholaemus*

C NEAR THREATENED

- 1 Darter *Anhinga melanogaster*
- 2 Painted Stork *Mycteria leucocephala*
- 3 Oriental White Ibis *Threskiornis meanocephalus*
- 4 Pallid Harrier *Circus macrourus*
- 5 Black-bellied Tern *Sterna acuticauda*

ANNEXURE -3**Summary****Names of Reserve forests and hillocks**

- 1 Arabittu Reserve Forest Designated IBA: KA-36
- 2 Chikkanahlli Reserve Forest
- 3 Malleswara gudda
- 4 Gujgegowdanapurada gudda

Names of River, Lakes and Tanks**A RIVER**

- 1 Kapila

B LARGE SIZE

- 1 Bilikere
- 2 Hebbahall reservoir
- 3 Karigala Kere
- 4 Karimuddanahalli kere

C MEDIUM SIZE

- 1 Chowdikatte
- 2 Daitanakere
- 3 Garikekatte
- 4 Gujgegowdanapurada kere
- 5 Harohalli doddakere
- 6 Kenchana kere
- 7 Marblli kere
- 8 Muddanahlli kere
- 9 Naduvina kere
- 10 Ratnapuri
- 11 Santhi kere
- 12 Shule kere
- 13 udduru kere
- 14 Vaddaragudi

D SMALL SIZE

- 1 Alanahalli kere
- 2 Bastimadamanahalli kere
- 3 Chikkereyour kere
- 4 Devikere
- 5 Dura
- 6 Gadojogihundi
- 7 Gowripurada kere
- 8 Hairege katte
- 9 Harohalli chikkere
- 10 Hebbalaguppe kere
- 11 Hundimala
- 12 Indirangara kere
- 13 Jayapura kaggere
- 14 Jayapura hoskere
- 15 Jodiyalada kere
- 16 Kadanahalli kere
- 17 Karulu katte
- 18 Kodasige
- 19 Maddur chikkere
- 20 Malara katter
- 21 Malare
- 22 Muganahundi kere
- 23 Nadappana halli
- 24 Nanjahalli kere
- 25 Santhe kere
- 26 Vachanahalli

**Terms used to indicate status**

R – Resident, A – Abundant, B – Breeding C – Common
WV – Winter visitor U – Uncommon
SV – Summer visitor Ra – Rare V – Vagrant

CORRESPONDENCE

Nesting of Common Kestrel in the Upper Nilgiris.

SELLAMUTHU SOMASUNDARAM, Division of Conservation Ecology Salim Ali Centre for Ornithology and Natural History, Coimbatore 641 108, India

The Common Kestrel *Falco tinnunculus* is one the common falcons in the open habitats, with scattered trees and scrub as well as in the grasslands and the fields. It is a resident of South India and Sri Lanka. Kestrels hunt field mice, lizards and occasionally small birds (Ali & Ripley 1987). It is reported that in many places the populations of Common Kestrels were declining and the prime reason is breeding habitat loss and habitat degradation (Petty *et al.* 2003). Zarri and Rahmani (2005) reported that it is a very common resident species in the Upper Nilgiris in a three years study on the ecology of the shola and grasslands and no nests were found, but it quoted that Primrose (1904) found a nest with four eggs in this region in March 1903. Ali and Ripley (1987) reported that the Kestrel breeding was confirmed in the Western Ghats especially from Khandesh to south of Kanyakumari from March to May. However no information was available about the breeding in the Western Ghats region. During a field study in the Upper Nilgiris on May 25th 2007, in the Mukutthi National Park, Upper Bhavani area around 16.30 hrs, a pair of Common Kestrels were observed soaring near the dam area. The female was noticed carrying a 30 cm long snake in its bill. The bird was followed for nearly half an hour and it perched on the high tension power line. After a few minutes, the Kestrel moved towards the dam side.

The Kestrel pair had built a nest in a projection of the wall, on the outer topside of the dam. The nest was loosely packed and cup shaped, built using the twigs and some decayed straws. Three completely grown chicks were noticed. The nest was inaccessible to Bonnet Macaque and other ground predators. The female was seen holding down the snake in its leg, tearing it to shreds and feeding the chicks. The male sat on the high tension power line, which was about 10 meters away and was vigilantly looking around. The feeding activity was observed up to 17.30 hrs.

References

- Ali, S., and Ripley, S. D. 1987. Handbook of the birds of India and Pakistan. Compact edition, Oxford University Press, Delhi.
- Petty, S.J., Anderson, D. I. K., ¹Woodland Ecology Branch, Forest Research, Northern Research Station, Roslin Midlothian EH25 9SY, UK Davison, M., Little, B., Sherratt, T. N., Thomas, C. J. and Lambin, X. 2003. ²Department of Zoology, University of Aberdeen, Tillydrone Avenue, Aberdeen AB24 2TN, UK The decline of Common Kestrels *Falco tinnunculus* in a forested area of northern England: the role of predation by Northern Goshawks *Accipiter gentilis*. *Ibis* 145: 472-483
- Zarri, A.A., and Rahmani, A.R. 2005. Annotated avifauna of the Upper Nilgiris, Western Ghats, Tamil Nadu, India. *Buceros* 10(1) 16.
- Primrose A.M., 1904. Birds observed in the Nilgiris and Wynad. *J. Bombay Nat. Hist. Soc.* 16: 163-166.

Distribution Range Extension of Red-whiskered Bulbul *Pycnonotus jocosus*. A.M.K.BHAROS. B-101, Gayatrinagar, PO; Shankarnagar, RAIPUR. CG, 492007

The distribution range of the Red whiskered Bulbul has been defined as:

- From Himachal Pradesh east to Arunachal and throughout most of India except parts of North & North west (*Grimmett & Inskipps* –1998)
- Ali & Ripley (1987) mention its distribution in West Bengal, southwards through Orissa, Eastern Andhra Pradesh and that of other Subspecies *Pycnonotus jocosus fuscicaudatus* in western India from Tapti river and Madhya Pradesh (*apparently absent from northern parts*).

During my visit to Sidhi dist, Madhya Pradesh (22:475 & 24:42 N, 81:184 & 82:483 E) on 15th October 2004, and on my way to the Jogdahi Gharial Sanctuary, (Son River) situated 40 Kms north east of Sidhi Dist HQ, en-route at location about 25 Kms, a bird was seen perched on a small road side tree. The bird obliged and provided sufficient opportunity for detailed observations. During the period of observation it emitted call of *pettigrew* twice, which perfectly matched with that mentioned in the literature. The physical details as well as the call lead to the identification of the bird as belonging to this species.

The map showing the distribution range of the species (*Grimmett & Inskipps P-696*) however does not cover, border Sidhi Dist, which is situated on extreme northeast of Madhya Pradesh, so also the range mentioned by Ali & Ripley who mention its distribution in the southern parts of the state (*Map-76*) as mentioned above. In available literature the area around River Son does not indicate occurrence of any sub-species.

As all the records mention its occurrence in the central & southern Madhya Pradesh, so the sighting of the species at this location in north east, suggests extension of its distribution range beyond the defined limits and is worth a highlight.

References

- Salim Ali & S. Dillon Ripley, Compact Hand Book of the Birds of India & Pakistan, Ed 1987. Vol –6, P-412.
- E.C. Stuart Baker, The Fauna of British India, Ed-1924. Vol -1 PP-396.
- Salim Ali & S. Dillon Ripley, The Pictorial Guide to the birds of the Indian Subcontinent, Ed 1995. P-124.
- Salim Ali & S. Dillon Ripley, Hand Book of the Birds of India & Pakistan, Ed 2001, Vol-6, P- 77.
- R.Grimmett, C Inskipps & T Inskipps, Birds of the Indian Subcontinent, Ed 1998, P-696.
- R.Grimmett, C Inskipps & T Inskipps, Pocket Guide to the Birds of the Indian Subcontinent, Ed 1999, P-274.
- R.Grimmett, T Inskipps & S.P.Mehra. Uttar Bharat Ke Pakchhi, (Hindi Edition of Birds of North India), Ed- 2004, P-224.

Cover: Photographs taken during a visit to the nesting colony of terns and pratincoles at Halmaddi Island, near Belgaum. For details and photo captions read the article (page 67-69).
Photographs by **S. Shreyas**

Address for Correspondence :

Newsletter for Birdwatchers

No 10, Sirur Park B Street, Seshadripuram,
Bangalore 560 020, India. Tel. 080 2356 1142, 2346 4682
E-mail : <navbarat@gmail.com>

Printed and Published bi-monthly by S. Sridhar at
Navbharath Enterprises, Seshadripuram, Bangalore - 560 020, India.
for Private Circulation Only.

